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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BSH HOME APPLIANCES CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

CAMPBELL, NATASHA N.

ART UNIT	PAPER NUMBER
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1792

NOTIFICATION DATE	DELIVERY MODE
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12/28/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NBN-IntelProp@bshg.com

Office Action Summary	Application No. 10/582,246	Applicant(s) CLASSEN ET AL.	
	Examiner NATASHA CAMPBELL	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18,20-29 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18,20-29 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's amendments and remarks in the reply filed on 08/24/2009 have been acknowledged and entered.
2. Claims 18, 20-29, and 31-34 are currently pending in the application.
3. The rejection of Claims 25 and 29 under 35 USC 112 have been withdrawn in view of applicant's amendments. The rejection of Claims 18, 20, 22, 24, 26, 27, 29, and 32 under 35 USC 102 have been withdrawn in view of applicant's remarks.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 18 and 20-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Reichold et al. (US 2003/0127110), and further in view of Graf et al. (US 4,188,807).

8. Regarding Claim 18: Reichold teaches a dishwashing machine comprising a washing container for retaining therein items to be washed [0006]; and a dosing device operable to add an additive product into the dishwashing machine [0010], the dosing device being operatively connected to an arrangement that separately stores chemical products independent of one another (Fig. 1, elements 50-52), and the dosing device being operable to independently add into the dishwasher at least a portion of a chemical product [0011]. He teaches that the dishwasher includes a control system configured to automatically control the dispensing of the chemical products [0026]. It is noted that the containers are fully capable of storing chemical components that make up an all-round additive product. Reichold teaches that the chemicals are dispensed into a tank (Fig. 1, element 15) where mixing can take place prior to entering the chamber (12) where the dishes are located [0027].

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9. Reichold does not teach that the dosing device is operable to independently add at least two but not all of the chemicals together. Reichold does not teach that the dosing device is operable to add a reaction mixture of the chemical products.

10. Graf teaches a dosing device for a washing machine in which chemical products are stored separately (Fig. 6), and proportionately metered into a washing solution as necessary (col. 5, line 54 – col. 6, line 12), to include dosing two- but not all- of the chemical components. For example, Graf teaches that a bleaching agent and catalyst can be added together (col. 5, lines 43-48). He teaches that the metering devices are controlled by a program control device (col. 8, lines 36-38). He teaches that controlling the dispensing prevents unnecessary overdose, thereby providing an environmentally-friendly dispensing system (col. 7, lines 20-29).

11. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to modify the dosing device of Reichold to be operable to add at least two, but not all of an additive product, or a reaction mixture of the additive product, in order to reduce chemical overdose and waste.

12. Regarding Claim 20: Reichold and Graf teach the elements of Claim 20, as described above. Reichold teaches that the detergent is directed to tank (15) where it is mixed prior to entering the dish cabinet. Graf teaches that the dosing device includes a pre-mix channel to which the chemicals are discharged and mixed together to form liquid reaction mixture (Fig. 1, element 12, col. 8, lines 38-47 and 54-59).

13. Regarding Claim 21: Reichold and Graf teach the elements of Claim 18, as described above. Reichold further teaches that the dosing device is operable to add

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only the required products for a process step [0034]. Graf also teaches that the dosing device is operable to add only the required material (col. 8, lines 36-38 and col. 6, lines 1-12).

14. Regarding Claim 22: Reichold further teaches that the dosing device is operable to add chemicals that are stored in at least one of a plurality of refillable storage containers [0031] in a container form including a common housing with partition walls and individual separate units (Fig. 1, elements 50-52).

15. Regarding Claim 23: Reichold and Graf teach the elements of Claim 18, as described above. Reichold and Graf further teaches that the chemicals include a liquid ([0027] and col. 9, lines 52-53, respectively). Further, the dosing devices of the references are capable of dispensing chemical products that are formed from both a concentrate and non-concentrate.

16. Regarding Claim 24: Reichold and Graf teach the elements of Claim 18, as described above. Reichold further teaches that the dosing device is operable to add the chemicals to the washing container using a conveying device ([0027] and Fig. 1, elements 54, 56, and 58) that is not a micro-dosing pump.

17. Regarding Claim 25: Reichold further teaches that the dosing device is operable to add in chemical while regulating the addition parameters, time, and quantity of the chemical products for a process step depending on the process steps and/ or contamination that is detected automatically using sensors or manually ([0027]-[0029] and Fig. 3).

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18. Regarding Claim 26: Reichold further teaches that at least one of the chemical supplies may be regulated by means of a monitoring device, and the device is configured to produce a program interruption in response to a fault [0031] or alarm [0031].

19. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reichold et al. (US 2003/0127110) and Graf et al. (US 4,188,807), as applied to Claim 18 above, and further in view of Matz (US 4,839,454).

20. Regarding Claim 27: Reichold and Graf teach the elements of Claim 18, as described above. Reichold further teaches a plurality of storage containers, a plurality of level sensors for measuring a filling level in the containers, and a fill level value indicator [0022]. The references do not teach a low level alarm for generating at least one of a visual or audible warning.

21. Matz teaches a dishwasher dispensing device (see abstract) in which the filling level of the storage containers can be measured by level sensors (col. 3, lines 13-16) and can be displayed visually by a display device (col. 3, lines 26-28; col. 5, 50-56). Further, Matz teaches that if the level is too low, a visual and audible warning is carried out (col. 5, lines 25-30). Matz teaches that the warning is used to give the user enough time to refill the product (col. 3, lines 46-49).

22. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide level sensors to measure the filling level of the storage

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containers and issue a warning when the levels become low, as taught by Matz in the devices of Reichold and Graf, in order to avoid running out of the supply of the product.

23. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reichold et al. (US 2003/0127110), Graf et al. (US 4,188,807), and Matz (US 4,839,454), as applied to Claim 27 above, and further in view of McNabb et al. (US 2002/0117511).

24. Regarding Claim 28: Reichold, Graf, and Matz teach the elements of Claim 27, as described above. They do not teach the dishwashing machine comprises an internet connection, means for automatically notifying a dispatch device, or means for dispatching chemical products.

25. McNabb teaches a detergent dispensing system in which the filling levels of the storage container are monitored; and further, the dishwasher automatically orders additional supply from the internet when it is almost empty (page 3, [0034]). McNabb teaches that additional product can be requested before the current supply runs out (page 3, [0034]).

26. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the prior art devices by providing an internet connection to request additional product, as taught by McNabb, in order to obtain additional product before the existing product is used up.

27. Claims 29, 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf et al. (US 4,188,807).

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28. Regarding Claim 29: Graf teaches a method of dosing additives in a washing machine for cleaning the articles retained in the washing machine (see abstract). He teaches that the step of dosing an additive product including dosing, from an arrangement that separately stores the basic chemical products of an all-round additive product (col. 5, line 57- col. 6, line 12) independent of one another (col. 5, lines 66-68). Graf teaches that the chemical products are proportionately metered into a washing solution as necessary (col. 5, line 54 – col. 6, line 12 and col. 21, lines 44-49), which is understood to include dosing two- but not all- of the chemical components. For example, Graf teaches that a bleaching agent and catalyst can be added together (col. 5, lines 43-48). He teaches that the chemicals are dispensed into a pre-mix channel where they mix to form the washing solution needed for the process (col. 8, lines 39-50).

29. Although Graf does not teach dispensing the chemical products into a dishwasher, he teaches that the method is utilized in a washing machine. One of ordinary skill in the art at the time of the invention would have recognized the application of the method to a dishwashing process since both processes require dosing cleaning agents into a washing chamber to clean the articles therein. One of ordinary skill would have been further motivated to apply the process to a dishwashing machine in order to prevent unnecessary overdose of cleaning agents, as suggested by Graf (col. 7, lines 12-22).

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30. Regarding Claim 31: Graf further teaches dosing in only the required chemical products needed for a process step (col. 7, lines 50-65). He teaches that a conveying device (pump) is used (col. 9, lines 30-35).

31. Regarding Claim 32: Graf further teaches that the step of doing includes dosing the chemicals into a pre-mix channel (col. 8, lines 40-7). He further teaches that the reaction mixture produced is a liquid mixture (col. 8, lines 55-59). It is noted that the pre-mix channel is interpreted to read on the "micro-reactor", as it is within this channel that the chemicals are initially dispensed and allowed to form mixtures (thus undergoing at least a physical reaction) prior to entering the washing chamber.

32. Regarding Claim 33: Graf teaches that the active substances are supplied to the pre-mix channel in a metered manner by gear pumps (see col. 9, lines 21-29). The pre-mix channel serves as the reactor where the separate chemicals combine and form a cleaning mixture to be dispensed into the washing container. Although he does not specifically teach the use of a micro-dosing pump, Graf teaches that by using pumps to meter the wash products, the dosing is accurate, and liquids of varying viscosities can be included (col. 9, lines 24-29).

33. It would have been obvious to one of ordinary skill in the art to use a micro-dosing pump to deliver the products in order to supply small amounts of products, such as in the event a highly concentrated product was being used.

34. Regarding Claim 34: Graf further teaches that the step of dosing includes dosing in an additive product while regulating the addition parameters, time, and quantity for a

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process step depending on the process (col. 7, lines 59-65; col. 21, lines 56-58; col. 23, lines 42-49).

Response to Arguments

35. Applicant's arguments, see pages 8 and 9, filed 08/24/2009, with respect to the rejection(s) of claim(s) 18 and 29 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Reichold et al. (US 2003/0127110) and Graf et al. (US 4,188,807). Reichold and Graf appear to teach the structural elements of the dosing device as claimed. Graf teaches a washing method comprising the steps of dispensing washing agents together to form a complete washing mixture for cleaning articles. These newly applied references appear to read on the presented claims, as described in the rejections above.

Conclusion

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATASHA CAMPBELL whose telephone number is (571)270-7382. The examiner can normally be reached on Monday-Friday; 8 AM-4 PM.

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on (571) 272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art
Unit 1792

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Examiner, Art Unit 1792
16 December 2009